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[Rhonda <K.:Brooks>](mailto:Rhonda.K.Brooks@epa.gov)
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Date: 8/28/2014 7:41:32 AM

Subject: RE: Message from KMBT_C452

Attachments: [West Lake IB Alignment Alternatives Assessment Report 8-25-14.pdf](#)
[Transmittal IB Alternatives Assessment 8.26.14.pdf](#)

Rhonda –

Attached are the 1) USACE IB Alternatives Assessment Report, and 2) EPA's transmittal letter to counsel for Republic. If you have any questions please don't hesitate to contact me.

Regards,
Alyse

Alyse Stoy
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(913) 551-7826 phone
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stoy.alyse@epa.gov

From: Hamm-Niebruegge, Rhonda K. [<mailto:RKHamm-Niebruegge@flystl.com>]
Sent: Wednesday, August 27, 2014 3:40 PM
To: Brooks, Karl
Cc: Slugantz, Lynn; Stoy, Alyse; Hague, Mark
Subject: RE: Message from KMBT_C452

Thank you Karl.

Rhonda Hamm-Niebruegge
Airport Director
Lambert-St. Louis Int'l Airport
314-426-8020
rkhamm-niebruegge@flystl.com

 Lambert_Hrz

From: Brooks, Karl [<mailto:brooks.karl@epa.gov>]
Sent: Wednesday, August 27, 2014 3:38 PM
To: Hamm-Niebruegge, Rhonda K.
Cc: Slugantz, Lynn; Stoy, Alyse; Hague, Mark
Subject: Re: Message from KMBT_C452

Thanks for forwarding this report, Rhonda. The EPA just directed the prps to consider the Corps of Engineers more detailed IB design conceptual study. The goals of this prp study will be to furnish the Airport and City, as well as FAA, sufficient information with which to assess any IB project from an air safety perspective.

I will ask that you be sent a copy of the Corps document and epa's transmittal letter.

Yours
Karl brooks
Sent from my iPhone

On Aug 27, 2014, at 1:52 PM, "Hamm-Niebruegge, Rhonda K." <RKHamm-Niebruegge@flystl.com> wrote:

Timely discussion as we had a bird strike that is on record again. See attachment.

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 Lambert_Hrz

From: netscan@flystl.com [<mailto:netscan@flystl.com>]
Sent: Wednesday, August 27, 2014 1:33 PM
To: Hamm-Niebruegge, Rhonda K.
Subject: Message from KMBT_C452

<SDIR-00214082713330.pdf>



U.S. Army Corps of
Engineers

ISOLATION BARRIER ALIGNMENT ALTERNATIVES ASSESSMENT

WEST LAKE LANDFILL BRIDGETON, MISSOURI

FOR

**Environmental Protection Agency Region 7
Superfund Program**

DATE: 25 August 2014

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Isolation Barrier Alignment Alternatives Assessment West Lake Landfill, Bridgeton, Missouri

1. Summary

.S. - d d S - p f
S - - f - d R p - R d
d R - - d D p RD - d p p d - - d - f - I -
- I - - - df d . p p f - I
p - f- d SS -d- d S- - - df f
- - -d - - p- d - - RI - d p - l
1 - 1 f - - df . - f p p d -
f - f I p- - -d - - - d d -d - - f
p p d - - d - - d . - S - p d d
d d - - - - f - p - -
- - - -dd - f - - - - - - - .

p f - - - d

1. f R-d - I p- d - - RI
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d f I . - - d f RI

- f 1 - d ff -dd RI -
d f I .

- f 3 - p f I - d -
RI - p - d d f I .

2. p- f I -
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I p - . - - - d
p - f d f -d - - - d d -d - - f p p d-
- - p- d - . -d - - - d d -d - - f -
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- f d d - - .

3. D - f I D - d ff
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- 1 d d. f f SS - RI 1
- d - d

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. - d ff d - - 18 f - f
d - f . - pp - - d
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- f d . I - p - d p - d
f d p d f d - d p - ff .

4. - - p - df - - -
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I - d pp .

2. Background

- - df - p d RI 1 73 - d - f- d f -
p - - d - p d - - d d- d- f
- df p - . RI p - - d - d- 1 - 1 - d 2. - 1 - d
-d - d S- - - df - f - - - d - - df - d
p - d d - D p- f - - R D R p f 1 7
200 . 1 - 2 p - d 1 - 1 d S- -
- df . d S- - - df f - - d S
- - - - d 200 d - p- f - - p - d
p - d - - d - df p - d p - -ff . I 2010 - d
p - d f d S - - - f d S- - - df
d - - p SS . SS - f d 2012 f - d -
p f - df f- . I - 2013 p - d f - I
f d - - d D R R p p- d - -
- p - f - d - d
d - f d d d R ' p d d -
- I RI 1 - 1 - d SS . S d R
- d - - d R d d - I p
p - d .

3. RIM Isolation Alternatives

D - d 2014 - d S RD - d R
d d d - d p - RI - - - p - - -
d d d f 1 f- - - p SS
f p - - df 2 - - f - - - -p -

would interrupt the “waste to waste connection”
 - - df 1 - 1. - f - - d S- - - df - d

3.1 Concrete Isolation Barrier Wall

D S RD - d RPs' d f - - -
 p - - - p p d R . - - d d
 1- I d - d - - df 1 - 1 - f
 - f - d - - - d - d
 - f S- d - - f - f S- . I -
 I d -d - - - df -
 p f 1 - 1. - - d p f - - - -
 - d -pp - 40 f .
 2- I d - d f- f 1 - 1
 - - RI - d f I . d I p- d
 d p p- f - - df d p f - - - p d
 180 f d p.
 3- I d - - - 1 f -
 - f f I . 3 d - f 1 - d d -
 p f - - df - p f -1 - 1.
 - d d - d - north of the North Quarry's -
 - d d ff - f - d d p
 - - df - - p- d d - d - - df - .
 - - d p f - - - d f 3 p d
 -pp - 40 f - d d p f - - d f 3
 p d -pp - 80 f . f RI d - d -
 - d d d f I d - f RI d I - -
 - d d f - - - RI d f I .
 p p d - - p - - d R - p f d - d - d
 d - - p d d- p- p f - . f - d - d p
 - d p d - - - d - - - - d
 f p p f- p- .

3.2 Excavation to Create an Air Gap

- - d d - RI f SS f - - -
 - d f - - df d d - d - - -p -
 p - - d S- - - df - d
 - - df - d p SS f d -p. - f - -p
 - - d - - 1. 1 - -
 d p f - - - d - -pp - 40 f . p

- p p - - d - - - d d p d - - - f
 2. 3.0 - 1 - . R - d f - - -
 - - d f - - d - -pp - 00 000- 00 000
 - d .

- -p- - d p - d -
 d d - ff d f - -d - - - d - - -
 I - - d d - - - - d - d d - f -
 d - - d d - - - - d ff- - - p .
 - - d d - - RI d - -f -
 - d ff- p . dd - - -p d - - -
 - d p d - - d - ff f - f - d
 p - d d ff - - . - d f - d - - f - - -
 p- - d - p d - d f f d - - .

4. IB Alignment Alternatives Assessment

p - f- d d - d f
 -d - - - d d -d - - f - - - d p d - - p- f -
 - ' -d - - - d d -d - - p - - f- .

4.1 *Assessment Factors*

d - - - d d -d - - f - - d f d p f- -
 d d p- - d d - d d
 f - - d d d - d - - f- -

- - -
- d -
- d - - d -
- RI R - S f I
- - f SS f I
- -S S-f
- ff-S S-f
- ff-S - - p - - d D p -
- D - f D
- D - f
- I p- I f -
- - -

D - - d f d - d p f - I d - d
 d - f -d - - - d d -d - - . d p - -
 - - - d - - - p d d - - p .
 -d - - - d d -d - - f - - - d . I d d - -

d f d - - d - d d - - d - d - d d - d - -

4.2 IB Alignment Alternatives - Advantages and Disadvantages

1 - d - -

- - f - - - p - d d p
- - d p - d f - - d - -
- - d - - d d f -
- S d - d d - d - - d p -
- d -
- p- f - -
- - -
- - f SS d f I

1 - D -d - -

- RI p p - f - d I p - d - -
- RI - d f d
- ff- -f d RI - - d -
- d ff- - p - f RI - d p - -ff - d
- - RI d f I d p - p d SS
- f - - d -
- I d d - d d p - f - p - - d d - d
- d d - p- d

2 - d - -

- RI - p- d d d - - f RI
- d d f
- RI - p- d - d f I f RI
- d d f
- ff- -f p - RI p

2 - D -d - -

- S f - - - d - - -
- d p - d d - f - d f
- -
- f d - - d p - d - f - - d
- - - f - - -
- p - f - f SS d f I

- - - d - d -f d f - f -
d. - RI - -
- ff- - -f d f - f -
- ff- d p -
- d - d d - I - d -
f - - - d
- - p- - f - - d - - - df
- - d f SS .
- f - f - p - f -

3 - d - -

- - RI p d d d - - p- d
1 - - - p d d f RI
- d d d d - - .
RI - d p - RI - d f I
- - -f d RI d d - -
- d f d f RI d d
- ff- -f - p- d d - RI
- ff- d p - f RI - p- d - d f d
f RI d d
- p- - f - p - d - p- d
- - f -

3 - D -d - -

- f - - - - p - d d p -
1. p - - -
- d - - 1 f d d f - - d
- f - - d - -
- f d - - d - -ff - 1 d - f
- - d - -
- - 1 f - f SS f I
- d - d d - p d p- d 1
- - f - d - - - df - - d
f SS p- d

4.3 Relative Comparison of Alignment Alternatives by Assessment Factor

- 1 p- f - - 's advantages and disadvantages by
- f- .

Table 1: Relative Comparison of Alignment Alternatives

| Factor | Alignment 1 | Alignment 2 | Alignment 3 |
|---|--|--|---|
| Excavation Volume | - - 0 000 — | - - - d d - - f p - f - d 180-f d p - - d - d f - - d -d | pp - - - 1 000 — f - - 2 |
| Odor Potential | - d p - d f - - d | d p - - 1 - d 3 d f - - d . d - - - df p - . | d p - - 1 d f - - d |
| Bird Hazard Potential | - d - - d p - d f - - d | d - - d p - 1 - d 3 d f p d - . d - - - df p - . | d - - d p - - 1 d f - - d |
| RIM Remaining South of Barrier | - f RI - f I p- d - - d f RI - d d | — - RI - - - p- d - - df | - - f RI d - f I p- d 1 - d p - RI d - . f RI d f |
| Potential for Future SSE North of Barrier | p- d - p - f f SS d f I d - d - d f d -d d. | p- d p - f - f SS d f I d f d -d d - - f I . | p- d p - - 1f - f SS d f I d d -d d - - f I 2 d f f I |
| On-Site Safety | - - - -f - - 3 d RI - - d. | - - -f p- d 1 - d 3 d f - f - - - d - d - d d. - -f d RI . | - -f 1 f RI - - d - -f 1. - -f - 2 p RI f RI d. |

| Criteria | Alignment 1 | Alignment 2 | Alignment 3 |
|--|---|--|--|
| Off-Site Safety | - ff- -f - 3 d - - d RI - - d - - d ff- - p - f RI -ff - d p . | ff- -f d f - f - - - d ff- - p - - -ff - d f -ff - d . | ff- -f - 1 f RI d - . ff- -f - 1 d ff- - p - -ff - d |
| Off-Site Waste Transportation and Disposal | RI - - - d - p- f - - - ff- d p - . | - f ff- d p - f -RI - d d d - - d p - -p- | ff- d p - p - d f - RI - d f - - - f RI - d d |
| Duration of Design | S d d - d - - d p -d - | d d - d - 180-f d p p -d - - d p d | d d - - 1 d d - f p - d - - d p - d d - d d p |
| Duration of Construction | S d - d - | d - - 1 - d 3 d 180-f d p f - d - - d - -d | d - - 1 d 30 40-f - d d p f - |
| Impact to Existing Infrastructure | p- f - - - p- p - f - f - d d - d d d - p- d | - p- - I f - d - - df - - - d SS | d - p- - I f - d - - df - - - d SS |
| Technical Feasibility | - - | f - f - -p - f - | - - - d ff - 1 |

4.4 Alignment 1 Advantages Discussion

f - 1 d d - f - - d
- f - - - d. R - - d -
f - f 1 -pp - 0 000 - d . - -
- - f - - f - p d - -
d - . d - d d -
p d d f - - . - df d - -
f d - d d d - f d d -
f- - -d - - .

d - - d - - ff - - f - -f S. p
 - - - df - d 10 000 f f - - S. p
 - S 7. l - - f - - d - d
 f p f d - - d - d - p d
 - - - d p- d -
 - ff - d - - d ff d
 - p d - - - d - d f - - .

- d - 2013 d p f d d - - - d d - -
 - d S - f d S- - - df 2
 d - d -p d - 20-d- p d. d d -
 - d - D - 2014 d p - p
 f - p - 1 0 - d 2013. I p d - p - d
 d d - - d - - d p -
 d - - p - d d p d - . - d -p
 - p d - - d p - - f d
 d d p d - . - ff - dd d f
 d - d - - ff f - p d f - f d- -
 - -p d -d-p d p p - - d - -
 - 200 . dd - d f d- p - - df -

- g in trash are “tipped”, it is expected that gulls will likewise feed as excavation
 d d- d - -d d - - d - -
 - - - d -d f ff- - p . f - f
 - - p d- d d d - f f d
 - - d - - f .

S - - - ff - d - - - d - d
 - . p p f d- d S- - - df R
 - d - d - d - 24 p d - d
 - d - - d . I p d - - d f
 - - - d p d f - f I - .

1 d - d - - d d
 f I - d p- d - - - - d p f -pp - 40
 f . f - d p - d p - d - d -
 - df f d d d p f - - f - f-
 - - - f- f SS . d - - d - -
 - d f 1 I - d d- -d - - d -
 pp - f- f SS - - d d p - f
 2 - d 3.

-d - - f 1 - d d -
 d f 3 p - - f d- - d f d f I
 - - -d d. S - d- - d d d
 f d d p -d - d

d - - p - d d f - - f - d
ff - - d - - - .
1 - - -d - - f - -
f - - df - - d - - d p p f
- - f 1. - - d - p- f
- 2013 d d f - I f R - f -
f SS - d - df - . f - p-
f - d - d - d - - R -
d - d - - f - .

4.5 Alignment 1 Disadvantages Discussion

d -d - - f 1 - p- - -d - - - 2 - d 3
- - p - - - - d -d - - d d.
d d - - .
f d -d - - f 1 - - - f RI
- d f I RI - d f I . S
p p f - I p SS d S- - df f
- RI - - df - RI
d f I d p f f - p p . - f -
d -d - - 1 d d d - - f - RI
- d f I . - ff - - p f
-dd RI f d f I f RI f d d.
f RI - 1 - 1 - d d. d - d
- - f - p p f d R - - d
d - -dd - - - d- - d - d - - -d
- d - f - d - - f -dd -
RI . S d - f p - p - R d d -dd
- RI .
d d -d - - f 1 - I d - d RI .
- d RI d - - - p - d d p - f RI
- - -pp p - p- d d d - d - f - - d d
RI d p - p- -f f - - d p - f
- d ff- - p - d p - f- .
- -f - - d p p- - d
d -dd f - - d S-f - p . S - ff- d p - f RI p d
- d - p - . - d -ff f

- d d -d - d f -ff - d d p
 RI - - p - .
 - - RI - - -d ff- p - - d -
 d d - RI . - p - d f - -
 f RI - d p p d d - - -
 p p - - d p p - d - - d
 d p p - - d p - f - ff
 - d - d d - .
 ff- - - p - f - f -f - d -
 p- d - f . - - p
 -d - d - p RI - -dd f - d - .
 p- d - d ff - - f d - - d d
 -dd d R - d RI - - d. - f
 RI - - f - - p d - d -
 p - d - p f d p - f- d
 - - d - d RI .

4.6 Alignment 2 Advantages Discussion

p - -d - - f 2 - - p d - - RI
 f SS d S- - - df . - f - -d - -
 - p - - f - - f I .
 -d - - - f - ff- -f - dp RI - p- d
 d f - - d ff- p RI .

4.7 Alignment 2 Disadvantages Discussion

p - d -d - - f 2 f - f - - d d
 - - d. - d p f I d -pp - 180 f - d
 p - f d ff - f - pp d f I I d
 d - f - d - I f 1 3 -p- f
 - d d ff - . ff f - - d d -
 - -dd - d d - d - d -
 p p p - d. dd - - d- - - d
 d - d - d- - f - d p d p - p - -
 - d f 2 I d p - - p - - d
 - - p- - f- f d - p
 d - d ff - f - -d - R
 d - - d - - ff f -dd
 d - - - d.

D - d p - d d f - - f - - d
 - p d f - - d - d d p - - d d - f d
 d d f - - d. - p- f d - d d -
 f d - f f f - - - p - .
 f - f - - d f - - - f -
 - d - - d p - . d d S 4.4 - d -p - p d
 - - d p - - - f d . D
 - -p d -d-p d - d- d - d -
 - - d - f d f - d - d
 - - . dd - d p d f d - - -
 d d - d - -d d - - d - - - d
 -d f ff- - - p d - f - -
 p d - d d d - p d f
 - - - .

2 d - d d S- - - df f - -
 - f - - df - d d f I .
 maximum depth on the north side of the IB would be approximately 180'. The - d p
 f - d - d I - d - - d
 p - - p - d - f- f d -
 d - f SS d f I .

2 d - d - f d S- - - df - d
 d RI - - d - RI - p - d
 - - f -f f - d RI d d
 - - p- d - - . - f f -
 - d d p - - d - d f
 d - I - -f d d
 f - - 1 - d 2.

- d ff- -f d - f - - d d p- f
 - ff- d p - d. - d -ff f
 - f -ff - d . dd - d -ff
 - d p - f S - n's p - d customer's trash collection
 .

d -d - - f 2 - - d -
 - d - d - d p - -
 f I - d - d-f p d. D
 d - - f - d p- f - d - .
 - f - - d - p- f- d f - I f
 R p - f - - d p d - d - df
 - . f - p - f d p - f SS - d
 - df - .

- f - - - d 2 d d- d -
 - d d - f- p - - df . - d f - f
 d -d - f 2 f- 2 -d - . f -
 p- - f pp f 2.

4.8 Alignment 3 Advantages Discussion

p - -d - - f 3 - - - f - - d -
 f - f - - - d p- d 2
 p - - f RI f I - d p - p d
 SS p- d 1. f RI -
 d d - p f 1 - 1. f RI -
 d d p - p f I 3 - -
 p- d - - RI - - f I - .
 - - f- 3 - f d p- d
 - - - d f d p - d d -d d - - . S
 f RI f - - d d ff - f - d f
 -d - - - ff 1. If - d f -
 RI f I d d d - f - -d - - .
 -d - - f 3 - - - f
 1 2 f f RI - d f -
 -dd - RI d - f - - p - .

4.9 Alignment 3 Disadvantages Discussion

3 - f - f - - - d -
 2 f - - - d f 3 d d - d - d - -
 p- d f - - - d f 1. 3 d
 - - - d f - 1. p - d
 f - d d -d - - - - d f
 - - - - d d -d - - .
 3 - p - f d - 2 - - -
 p - f d - 1 d - d f - - - d. I
 -dd - - d - p - - - - d f
 3 d - - - f - - d - - d
 p d p - . - p - - - - -
 d - - d d p - . d - - f f f
 d d d - f - d -d - - .

3 - - - f - p - f d - - d p- d
 2 d - - - f - - d - p- d
 1 d - - d p - - - d f d d - d - d - - .
 d d S 4.4 - d -p - - p d - - d - - d
 - ff - p d ff f - - f d- .
 dd - d f d - - - d - - -d d f
 - p - f - d d
 - - d .

3 d - d - - df p f
 I d - p f d S- - - df - - -
 - - - p f - - df . - f
 - - - d d f 3 I . dd -
 - - - d - - df - 1 - - -
 - d p f - f -pp - 80 f . -dd - d p f - f
 - - - d - - d d f 3 I
 - f- - - f - f SS d f
 I . - d d f - - d -
 d d - d - d - - .

- -f f 3 d p- d 1 f
 d RI - - d - I . f RI
 d - d 3 d f d - - f d.
 - f 3 RI p d p- d 2 -
 RI p d d d - - f 2. -
 - dp d RI - -f f 3
 - 1 d f d - . - -
 -f f 3 d d f - - 2 d d
 - d d p f - - - d f - - - d d f 2.

Alignment 3's ff- f p - d - RI d d
 than Alignment 1's risk if the alignm - p - d RI .
 - - - f - ff- d - RI p f I
 placed through RIM would be dependent upon the depth of the RIM and the RPs' material
 - d p . d - d 1 d - -
 d - - d d - p d d - -
 - d - - d . R - ff- -f d - d -ff d p f
 RI - - d f - - f RI f
 - - d.

d - f d f 3 - 1 d d
 d f RI - d - - d- - - d I .
 d p f - - - f d d- - - f
 d . dd - - I d p p f -
 -dd - d d d p -d - d -

f - . - d d p f p f I . -
 1 d - - d d p f p f I .
 d -d - - f I - p- f -
 - - d - - d -
 d - d p - - f I - d - d-f
 p d.

Summary: The assessment conducted consists primarily of identifying the advantages and disadvantages of the proposed alignment options and comparing these options to each other. The advantages and disadvantages of each alignment carry risk and the extent of those risks and the ability to mitigate those risks must be carefully considered when selecting an alignment.

5. Design Considerations

p -dd f - - - p- d d d - d
 d f d. - f
 1 - d p - f 3 p f RI d
 - - . D d R d - d d - p-
 - d - f - - d - - - d d f d - d d
 RI p- d - - - d d - d -
 f - f - - d f d f p- - - d
 - d - d d p - - RI . - -f - d - d d p f-dd -
 - - - RI - - d - - d f p - -
 d d - d f p - - f -d - p- d
 d f d d - d.

p - d - d d d ff d
 f- - p - f - p f I - d RI .
 - p - d f- d p - p -d f
 RI - d - - d f RI - - d . I - - f - -
 d ff f- d . I - - d - p- - -
 p- - - - p f I - d - - p - -
 p f I . p - d -d - - f- - p - - -
 - f - - - - d d - f -
 - . R d - d d
 p - - - p - - d p- -
 d .

D p d p - d - d - d f
 I - - d -dd d - p- f I d RI - 2 -
 p - - - d .

Table 2 - Options to Address Remaining RIM

| Option | Description | Advantages | Disadvantages |
|-----------------------|--|---|--|
| RI - - RI | - - d f d RI - d f I | SS f RI - | RI - d - p d p - |
| | | | p - - - d - d |
| | | | p - - - d - d - - d - -ff |
| | | | I - RI - - d d-d - I . - f - d -d - - d - f I f - - - d - d - - d . I p - - - -f I - - - f - d p d p - f - RI p I . |
| | | | ff- - f d p - - - f -ff - d - d RI - . |
| I -S S - - | d p - d RI - d - RI - d-d - - d - - d d p SS | R d - f - - d d - p d - d d p d | ff f SS - - d RI - . - f |
| | | R d - f p d - - d f d - f d | - d ff p - df d p - f d p - f - d . S p f - - d d - f - - d d d -pp p - - - |
| | | R d - f p d - - d f d d - - d | R d f - f RI - - - - |
| | | | |
| d ₂ 2 I | I d ₂ 2 f- - SS -pp - - d f- SS | ff f - - - f RI | R - d f - f SS . D ff d SS |
| | | - - d d p - d d - - d f - - | R - pp f d ₂ - d ₂ - - - . |
| | | d d - p - - | I - d -f - d d ₂ |
| | | d d - - d- p - - | |
| S - df S | I - p f - df f I RI - d. I - - | f -p f - df - . - - - d d - d - p d p f - | - df - d - - p d - . |
| | | - - d - - d. R - -d p - - | d p - p d- - f SS - - . |
| | | | |
| | | | |

If - f p p - d R d d - - - - d f
 - d -pp p - d d f d - d . p- f
 d -dd - RI - f I R d - - - p
 p d SS - - RI .

6. Design Schedule Considerations

D p d - - - d f SS f f SS
 - RI 1 - 1 . f f d
 d - d - I - - d - d - .

- d- d d p - p d - d d - -
 - . p - d - - 30 0 0 - d 100 d - . 30 d
 - p - - d - f p f d - f d - p - d -
 - - d. 0 - d 0 d - - p - - f
 d - d f d. - D p p d d p d . I S ,
 d - d - - - d p f d f I ff - d -
 d p d d- - - f d - d

- d -pp - d - f d - - d p - -
 d - ff p p- - d p d - f d p d d
 - - - d f - d - . - -
 d p - d - . p - d p d p
 d p - - f designers; conduct “over the shoulder” or “in
 progress” reviews while the design team continues working instead of requiring the designers to
 p- d p d - - - d d - d f
 p f . - f d d - f .
 R d - d - d - - -
 p d - d - p f - - d d
 d p .

D - 2014 S - d R - p -d - d d
 - d d- d- - f- - d-f d. - d
 f p -d - d d - - d p d . f
 d d d f RI - .
 f RI - - d d
 d - f RI - d p d p - - - f d
 -p- f - p f RI .

- | | 1 | - d | -D | D | S | d |
|---|-----|---------|----|----|---|---------|
| • | 130 | - d- d- | p | - | - | - d - - |
| • | 0 | - d- d- | p | 30 | D | |
| • | 80 | - d- d- | p | 0 | D | |

• 80 - d- d- p 0 D
 • 40 - d- d- p - D
 • 40 - d- d- p p- f - f -
 - -pp - p d pp - - - p p- -
 f - -
 • - D D - - 430 d- -pp - 14 f I
 - d
 3 - d -D - d D D -
 • 180 - d- d- p - - - d - -
 • 0 - d- d- p 30 D
 • 110 - d- d- p 0 D
 • 110 - d- d- p 0 D
 • 0 - d- d- p - D
 • 40 - d- d- p p- f - f -
 - -pp - p d pp - - - p p- -
 f - -
 • - D D - - 0 d- -pp - 18 f I
 - d
 - 2 - pp d R S RD - - f
 d d - - d d.
 S - - - p p - f RI
 d f d - p d - - p d - d f - d. If
 1 d - d d f -dd RI -
 d f I - d d f RI d f d. If 3 d
 f - - d d f RI d d I
 - - - d - - - - RI - p - d
 d f I .
 - - p f 1 - d 3 - - - - d
 f RI - - d f - - f f I d
 p d -dd - - - - f 1
 - 1. d - d - - - -
 - p .

Summary: Because of the subsurface investigative work that remains to be completed, and the complexity of building a barrier in a landfill, the duration of the design will be long. One estimate for duration of the design effort could be as much as 18 months before construction commences. In general, there may be a few opportunities to accelerate the design process. However, the design effort should not be shortened to the point of sacrificing the quality of the design itself. Installation of the IB will be a complicated construction project and the success of the construction work depends on the thoroughness of the design and planning effort. The length

of construction cannot be estimated until an alignment is selected and the RPs determine their construction approach.

7. Airport Negative Easement Agreement

I 1 8 d - - d - - p d - R d f D R D -
 - d - S . I - - p p p- d p - .
 - p d f S . - d p - d S . p .
 - d S- - df - p - d- p - -
 - df . - - - - d - d - p -
 d - d - - - - p d- d - d - f d d
 - d p p - p - -ff -f - d - df p - d -
 - d - - - - f d - df p - p
 - p p - - - df . ff 200 - d
 d S- - - df - d. - - f d
 d f d - - d - -f p - - p .

p f - p p - f - - - - df - d
 p p - df - - - d- -pp - - . dd -
 - - - p f S . - d S . p
 - - - - f - - -
 f - d I - . D - 2014 f
 S . - d p d-dd - f - f - d
 - - pp . f - d d - d

- - d f - f - -
- - dd - f f - -
- p- f d - - d d - df - - d -
 - p f - - -d - - d -d f - p - ff-
 - d p- - -
- p- f - - d - d - d

p - - - d -RI - - d - d - - p - f -RI p -
 d - df - p p d - - - dd - -
 - d - - d -d d f - - f d
 - df - d - df d p - - - df p -
 - df .

p- f - p - -RI - - - df
 d - d - - dd p f - - - ff- - .
 p - d - - f d - - d
 - p d p - f p- d - - d -
 d p d p - f - R d d d d d
 - d f - - - RI - - dd p - - -

- d f -d -d d p - f - -
ff- d p - - d d - d p - .

Summary: The Negative Easement Agreement (NEA) between the City of St. Louis and the RPs is a critical factor to be considered as part of the design and construction of the IB. The NEA prohibits any activity that will result in the landfill cover being compromised; therefore, a waiver to the NEA will be required to install the IB. It is recommended that prior to the start of design, the RPs provide the City of St. Louis and St. Louis Airport Authority the information necessary for the City and Airport Authority to make a determination on which IB alignment(s) they would support.

References

- p d p - - d - - - S-f - d f
200 .
- d - - I . d - df d - - d - d
- - - f - df R d - 1 2014.
- S - - 27 2013 - I . - d - d . . - - .
d - df - df - - - 1
- - I . - - p S S
I . - d . . - - . 2 2013
d - df - - - 2.
- D R - d . S- d - . R. - . 2014. d f
S - - f -f d S - 1 0-2013. d - - d -
- - d f S D- - - S - R p 20.
- - S pp I . SI 2014. - f R -
- - df S p f d S .
- S - f - d D p- f - - R - 13 2013.
d d f - I - . 13S - 01088.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7

11201 Renner Boulevard
Lenexa, Kansas 66219

AUG 26 2014

ADVANCE COPY VIA ELECTRONIC MAIL

Jessie Merrigan
Lathrop & Gage, LLP
2345 Grand Boulevard, Suite 2200
Kansas City, Missouri 64108-2618

Re: Isolation Barrier Alternatives Assessment Report
West Lake Landfill Superfund Site

Dear Ms. Merrigan:

Please find enclosed the Isolation Barrier Alternatives Assessment Report for the West Lake Landfill Site (August 25, 2014) (Report) prepared by the U.S. Army Corps of Engineers (USACE). The U.S. Environmental Protection Agency requested USACE to prepare this report in support of our efforts to further evaluate the proposed design and construction of an Isolation Barrier at the West Lake Landfill Superfund Site. As detailed in this report, USACE has performed an analysis of various assessment factors, as well as identification and comparison of advantages and disadvantages related to the three proposed alignments.

As previously identified by various interested parties, evaluation of potential bird strike hazards to aircraft utilizing the Lambert Airport is important to consider as the EPA takes steps towards reaching a final decision regarding the construction of the Isolation Barrier. To that end, the EPA requests that the Responsible Parties use the Report as a basis to further develop more detailed plans for the Isolation Barrier, specifically including bird mitigation plans, for each of the three proposed alignment alternatives. The EPA understands that it may be necessary for the parties to develop a design for each alignment in order to prepare this deliverable. The EPA requests that this plan be submitted to the EPA within 45 calendar days of the date of this letter. To meet this deadline, we propose a conference call during the week of September 8, 2014, to discuss the technical scope of this effort. Please contact me, or David Hoefer at 913-551-7503, to confirm dates that you are available for a conference call.

The EPA appreciates your prompt attention to this request. If you have any questions regarding this letter, please do not hesitate to call me at 913-551-7826 or contact me via email at stoy.alyse@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Alyse Stoy".

Alyse Stoy
Deputy Regional Counsel for Enforcement



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